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EXAMINER BODDIE, WILLIAM				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/606,423

Applicant(s)

SENI, GIOVANNI

Examiner

WILLIAM L. BODDIE

Art Unit

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, 21-28 and 32-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-19, 23-27, 32, 34 and 35 is/are rejected.
- 7) ☒ Claim(s) 9, 21, 22, 28, 33 and 36-38 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. In an amendment dated December 3rd, 2008 the Applicant presented a Rule 1.132 Affidavit in an effort to overcome the Demartines art. Currently claims 1-19 and 21-28, 32-38 are pending.

Response to Amendment

2. The affidavit under 37 CFR 1.132 filed December 3rd, 2008 is sufficient to overcome the rejection of claims 1-19, 21-28 and 32-38 based upon Desmartines (US 6,661,409).

Allowable Subject Matter

3. Claims 9, 21-22, 28, 33 and 36-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

4. Applicant's arguments with respect to claims 1-19, 21-28 and 32-38 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, 6-8, 10-14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Hawkins (WO 94/10678).

With respect to claim 1, Hawkins discloses, an electronic device for written input and subsequent display of said written input, the electronic device (fig. 2) comprising:

a touch input screen (14 in fig. 3b), said touch input screen operable to accept written input (fig. 3b, for example; page 9, lines 19-24);

a display element (11 in fig. 3b, for example), said display element operable to display recognized text in a text recognition mode (fig. 5; page 11, lines 10-16) and digital ink that corresponds to the written input provided to the touch input screen (11q in fig. 4b) in an ink only mode (page 11, lines 5-9), wherein the recognized text is determined from the written input using a recognition feature coupled to the touch input screen (page 11, lines 10-16; fig. 5) and wherein the digital ink may be edited by the user (page 11, lines 5-6); and

a scrolling mechanism coupled to the touch input screen that enables at least a portion of the touch input screen (14 in fig. 3b) to appear to move as written entries are input thereon so as to continuously present screen space on the touch input screen to the user for written input (page 5, lines 6-8).

With respect to claim 2, Hawkins discloses, the electronic device of claim 1 (see above), wherein the screen is of a predetermined size (clear from fig. 3a) and the screen portion (14 in fig. 3a) is smaller than the predetermined screen size (2 in fig. 3a) so that only the screen portion appears to move during written input (clear from fig. 3a).

With respect to claim 3, Hawkins discloses, the electronic device of claim 1 (see above), wherein the screen has an input area including the screen portion on

which written input is entered and displayed (14 in fig. 3b) and an output area separate from the input area on which one or more of corresponding digital ink and recognized text is displayed (11, 11Q in fig. 3a).

With respect to claim 4, Hawkins discloses, a handwritten input user interface (HIUI) (fig. 3b, for example) for a portable device having a touch-enabled input screen with a predetermined area thereof (figs. 3a-5), said HIUI comprising:

a handwriting input area (14 in fig. 3b) residing in a predetermined portion of a touch-enabled input screen (2 in fig. 3b), handwritten text being entered using a stylus (page 9, lines 19-20);

an input/display scrolling window in said handwriting input area (14 in fig. 3b), written entries being scrolled such that writing space is continuously available within said handwriting input area (page 5, lines 6-8); and

a display area (2 in fig. 3a-5) operable to display recognized text in a text recognition mode (11Q in fig. 5) and handwritten input as digital ink (11Q in fig. 4c), corresponding to the handwritten input entered in the handwriting input area without the requirement of converting said handwritten input to text using a recognition element, in an ink only mode (page 11, lines 5-9).

With respect to claim 6, Hawkins discloses, a HIUI as in claim 4 (see above), including a recognition engine (218 in fig. 7) for recognizing individual words of the handwritten text, said recognized word operable to be displayed in the display area (11Q in fig. 5).

With respect to claim 7, Hawkins discloses, a HIUI as in claim 4 (see above) wherein stylus entries made in said handwritten inputs are text entries (text entries in 14 in fig. 3a, for example) and stylus entries made outside of said handwritten input area are pointer function entries (icons and softkeys 12a-d in fig. 3a, for example).

With respect to claim 8, Hawkins discloses, a HIUI as in claim 4 (see above), further comprising one or more action icons (12 in fig. 4c, for example) on said touch-enabled screen displayed together on a side of said touch-enable screen (fig. 4c).

With respect to claim 10, Hawkins discloses, a HIUI as in claim 4 (see above), wherein the handwritten input area is operable to display a menu of possible functions to the user (12a-c in fig. 3b), said menu comprising one or more of:

applying a recognition engine to at least a portion of the digital ink of the display area (12c' in fig. 3b).

With respect to claim 11, Hawkins discloses, a HIUI as in claim 10 (see above) further comprising one or more of:

an undo button (12b in fig. 3b), said undo button operable to undo one or more actions performed within the display area.

With respect to claims 12-14, Hawkins discloses, a HIUI as in claim 4 (see above).

While Hawkins does not expressly disclose offering display of digital ink in a variety of colors, fonts and sizes these limitations are seen as simple design choices that are quite obvious in the art. As such they are not seen as patentably distinguishing over the state of the art at the time of the invention.

With respect to claim 16, Hawkins discloses, a HIUI as in claim 4 (see above) wherein the user can control the rate of scrolling (page 5, lines 6-9; discusses that the scrolling can be manually performed).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawkins (WO 94/10678) in view of Lui et al. (US 6,256,009).

With respect to claim 5, Hawkins discloses a HIUI as in claim 4 (see above).

Hawkins does not expressly disclose a word separation line.

Lui discloses a handwritten input area that includes a word separation line and spans said touch-enabled screen's width (66_{1,2} in fig. 11).

Hawkins and Lui are analogous art because they are both from the same field of endeavor namely portable handwriting input devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the word separation lines of Lui in the input area of Hawkins for the benefit of using line information to determine whether the user has reached a scroll point (Lui; col. 4, lines 42-45) and to guide the user's handwriting.

With respect to claim 17, Hawkins discloses, a HIUI as in claim 4 (see above).

Hawkins does not expressly disclose a pen timeout.

Lui discloses, wherein a user can control a duration of a pen timeout (1212 in fig. 12).

At the time of the invention it would have been obvious to one of ordinary skill in the art to include a user controlled pen timeout as taught by Lui in the device of Hawkins.

The motivation for doing so would have been to provide an intelligent scrolling handwritten input (Lui; col. 1, lines 57-58).

With respect to claim 18, Hawkins discloses, a personal digital assistant (PDA) (fig. 2) capable of displaying words in a continuous handwritten text stream, said PDA comprising:

- a touch-enabled input screen (2 in fig. 2);

- a handwritten input user interface (HIUI) comprising:

- a designated handwriting input area residing in a lower portion of said touch-enabled input screen (14 in fig. 3a), handwritten words entered using a stylus or other functionally similar input device (page 9, lines 19-20);

- an automatically scrollable output area (page 5, lines 6-9), said handwriting input are being super-imposed on said scrollable output area (14 in fig. 3a), said scrollable output area displaying in an ink only mode digital ink strokes corresponding to stylus entries made in said designated handwriting input area (page 11, lines 5-9), said scrollable output area scrolling continuously at a rate (page 5, lines 6-9);

a text output area (11Q in fig. 4a) operable to display the digital ink strokes corresponding to stylus entries made, wherein the digital ink strokes may be displayed in the text output area without using a recognition element (11Q in fig. 4a); and

one or more action icons (17 in fig. 5, for example) displayed together on a side of said touch-enabled screen and providing access to editing functions for editing previously displayed words (page 14, lines 3-5).

Hawkins does not expressly disclose a communications port, a local storage or a plurality of switches.

Lui discloses, a communications port (40 in fig. 1) for communicating with a remotely connected computer (48 in fig. 1), data being transferred between said remotely connected computer and said PDA (col. 4, lines 5-7);

a local storage storing applications to be run on said PDA (22 in fig. 1);

a plurality of switches providing manual input to said PDA (44 in fig. 1); and

a scrollable output area scrolling continuously at a rate set by stroke rate (col. 2, lines 1-2).

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the storage, communications port, switches and stroke rate calculation of Lui in the device of Hawkins for the well-known benefit of a more fully functional computer.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hawkins (WO 94/10678) in view of Haneda et al. (US 5,698,822).

With respect to claim 15, Hawkins discloses, a HIUI as in claim 4 (see above).

Hawkins does not expressly disclose, wherein the user can place a cursor for digital ink modification in the display area.

Haneda discloses, wherein the user can place a cursor for digital ink modification in the display area (fig. 42, col. 1, lines 65-66; for example).

Hawkins and Haneda are all analogous art because they are all from the same field of endeavor namely, handwriting recognition touch screen devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to allow for user defined cursor editing of the digital ink of Hawkins as taught by Haneda.

The motivation for doing so would have been to allow the user to edit previously entered digital ink as well as to clearly illustrate the position of input/display.

10. Claims 19, 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawkins (WO 94/10678) in view of Kuriyama et al. (US 5,838,302).

With respect to claim 19, Hawkins discloses, a method of providing written input to an electronic device (figs. 6a-7), said method comprising:

receiving an entry from a written-entry screen area (202 in fig. 7);

displaying a corresponding digital ink stroke in said written-entry screen area (204 in fig. 7; 14 in fig. 3a);

automatically scrolling to present additional blank writing area to the user (page 5, lines 6-9)

displaying the written entries in a display area (11Q in fig. 4a), wherein displaying the written entries in the display area further comprises:

passing said received entry to a handwriting recognition engine (218 in fig. 7), said handwriting recognition engine converting said received entry to text (11Q in fig. 5), and displaying text in a textual display area (11Q in fig. 5) in a text recognition mode (114 in fig. 6a),

converting the written entries to digital ink and displaying the digital ink in the textual display area in an ink only mode (104-112 in fig. 6a).

Hawkins does not expressly shifting horizontally at a rate corresponding to an ink stroke rate.

Kuriyama discloses, shifting each displayed digital ink stroke horizontally (figs. 3a-d) at a rate corresponding to an ink stroke rate of the digital ink (col. 4, lines 45-48), whereby written entries appears to be scrolling off one side of a display as on ticker tape (figs. 3a-d).

Hawkins and Kuriyama are analogous art because they are both from the same field of endeavor namely portable handwriting input devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to side-scroll in the device of Hawkins as taught by Kuriyama for the well-known benefit of not requiring the user to does not have to continuously reposition the stylus at multiple lines.

With respect to claim 23, Hawkins and Kuriyama disclose, a method as in claim 19 (see above).

Hawkins does not expressly disclose, wherein the user can insert print characters within the digital ink of the display are further comprising activating a

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keyboard from a menu, said keyboard operable to be used to enter alpha-numeric characters intermingled with the digital ink.

Kuriyama discloses, the activating of a keyboard in a touch screen device to insert alpha-numeric characters (note the keyboard in fig. 3a; intermingled in fig. 3d).

Hawkins and Kuriyama are all analogous art because they are all from the same field of endeavor namely, handwriting recognition touch screen devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to allow the user to activate a keyboard to input alpha-numeric characters, taught by Kuriyama, into the device of Hawkins.

The motivation for doing so would have been to allow word input without being concerned with handwriting legibility.

With respect to claim 24, Hawkins and Kuriyama disclose, a method as in claim 19 (see above).

Hawkins does not expressly disclose specific actions in editing the handwriting.

Kuriyama discloses, wherein the user can edit handwriting in the display area, further comprising one or more of:

deleting one or more portions of ink traces of the digital ink;

inserting one or more spaces between ink traces of the digital ink;

removing one or more spaces between ink traces of the digital ink; and

inserting one or more new lines within ink traces of the digital ink (note the new line tool, 33 in figs. 3a-d)

At the time of the invention it would have been obvious to one of ordinary skill in the art to allow the user to insert a new line into the handwriting of Hawkins as taught by Kuriyama.

The motivation for doing so would have been to allow the user to properly format the handwriting.

With respect to claims 25-27, as these claims further limit events that were not explicitly required by the parent claim they are rejected here on the same merits as the parent claim 24.

11. Claims 32 and 34-35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hawkins (WO 94/10678) in view of Barrett et al. (US 5,260,697).

With respect to claim 32, Hawkins discloses, an electronic device for handwritten input and subsequent display of said handwritten input (fig. 2), the electronic device functionally comprising:

- a user interface having an ink text canvas (11 in fig. 3b) and a conveyor canvas (14 in fig. 3b);

- one or more ink text areas coupled to the ink text canvas (figs. 3b-4a);

- a conveyor area, coupled to the one or more ink text areas and coupled to the user interface (figs. 3b-4a), said conveyor area comprising one or more ink traces ("meeting with jeff at office" in fig. 3b);

- an event loop of the user interface (fig. 3), the event loop operable to respond to:

- pen down events (104, 114 for example in fig. 6a);

- pen move events (writing in 14 in fig. 3b); and

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wherein, one or more ink traces are sent to the ink processor for display after converting said one or more ink traces to text using a recognition element (138 in fig. 6b).

Hawkins does not expressly pen up/timeout event detection or recognition based on pen timeouts.

Barrett discloses, an event loop of a user interface, the event loop operable to respond to:

pen up events (*capture_one_stroke()* read points from table, *until stylus is lifted*; middle of column 35);

pen timeout events (*check_timeout*; 2/3 towards bottom of column 35),
wherein upon an occurrence of a pen timeout event in a text recognition mode, one or more ink traces are sent to the ink processor for display after converting said one or more ink traces to text using a recognition element ("in the preceding two cases, perform recognition on all buffered strokes" 2/3 towards bottom of column 35).

Hawkins and Barrett are analogous art because they are both from the same field of invention namely portable handwriting input devices.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the method steps of Barrett in the device of Hawkins for the well-known benefit of ensuring that the handwriting is not lost, and to perform tasks the user might have forgotten.

With respect to claim 34, Hawkins and Barrett disclose the electronic device of claim 32 (see above).

Hawkins further discloses, wherein upon an occurrence of a pen move event, an ink point is added to a current ink trace of one or more ink traces (fig. 3b; for example).

With respect to claim 35, Hawkins and Barrett disclose the electronic device of claim 32 (see above).

Barrett further discloses, wherein upon an occurrence of a pen up event, an ink point is added to a current ink trace of one or more ink traces and a pen up timeout event is scheduled (note the factors taken into account under the "check_timeout()" function).

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM L. BODDIE whose telephone number is (571)272-0666. The examiner can normally be reached on Monday through Friday, 7:30 - 4:30 EST.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sumati Lefkowitz/
Supervisory Patent Examiner, Art Unit 2629

/William L Boddie/
Examiner, Art Unit 2629
12/18/08